

**REMARKS**

The Office Action mailed on February 24, 2005, has been reviewed and the comments of the Patent and Trademark Office have been considered. Prior to this paper, claims 1-24 were pending, with claims 6 and 15-22 being withdrawn. By this paper, Applicants cancel claims 4, 5, 9 and 10, and add claims 25-27. Therefore, claims 1-3, 6-8 and 11-27 are now pending.

Applicants respectfully submit that the present application is in condition for allowance for the reasons that follow.

**Indication of Allowable Subject Matter**

Applicants thank Examiner Torres for the indication that claims 11-13 contain allowable subject matter. Applicants have placed claim 11 into independent form, as seen above.

**Rejections Under 35 U.S.C. § 102**

In the Office Action, claims 1-5, 7, 23 and 24 stand rejected under 35 U.S.C. §102(b) as being anticipated by Burgdorf (United States Patent No. 4,674,804), claims 1, 3, 4, 7-10, 23 and 24 stand rejected under 35 U.S.C. §102(b) as being anticipated by Klein (United States Patent No. 5,472,264), and claims 1, 3, 5, 7-10, 14, 23 and 24 stand rejected under 35 U.S.C. §102(b) as being anticipated by EP 0649781. In response, in order to advance prosecution, Applicants have cancelled claims 4 and 5 and partially incorporate the contents of claims 4 and 5 into independent claims 1, 23 and 24, and have added the contents of claim 1 (prior to amendment) and 10 to claim 8.

Applicants rely on MPEP § 2131, entitled “Anticipation – Application of 35 U.S.C. 102(a), (b), and (e),” which states that a “claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” It is respectfully submitted that the cited references do not describe each and every element of any of the pending claims.

**Claims 1, 23 and 24:** As a preliminary matter, based on the rejections proffered in the Office action, the amendments to claims 1, 23 and 24 should remove Klein and EP 0649781 as anticipatory references, since Klein was not used to reject claim 5 and EP 0649781 was not used to reject claim 4. However, there are additional reasons why claims 1, 23 and 24 are patentable in view of these references and in view of Burgdorf, as will now be discussed.

Claim 1, as amended, recites a brake system including a first and second brake system. The first brake system applies braking force according to a tandem master cylinder, and is constructed by two independent circuits which connect two master cylinder hydraulic pressure outlets of the tandem master cylinder and two brake units for two wheels, respectively, the two independent circuits of the first brake system for left and right wheels being connected to the tandem master cylinder. The *second brake system applies a braking force to other wheels according to a hydraulic pressure at a position of at least one of the two independent circuits*. An exemplary embodiment according to claim 1 allows for the total braking force of the brake system to be greater than a braking force of a conventional brake system where a booster cannot be used to influence braking at all wheels. Still further, such an embodiment allows for the generation of a braking force by one circuit (first or second) even if one other circuit (second or first, respectively) fails.

In contrast, Burgdorf fails to teach, among other things, a second brake system that applies a braking force to other wheels *according to a hydraulic pressure at a position of at least one of two independent circuits of a first brake system*. In Burgdorf, any second brake system that applies force to other wheels does so on account of brake force sensors 14, 15, 21, 22, and not according to a hydraulic pressure of a first brake system. For example, at col. 5, lines 62-67, Burgdorf states that due “to the respective electric signals fed to the evaluation

circuit 18, said evaluation circuit 18 permanently computes new braking values for the wheel brakes 3, 4 of the rear axle of the automotive vehicle and delivers corresponding control signals to the solenoid valves.” In Burgdorf, the electric signals received by the control circuit 18 are generated by brake force sensors 14, 15, 21, and 22. Thus, no brake force is applied according to a hydraulic pressure in a brake circuit, and, therefore, Burgdorf fails to teach the invention according to claim 1.

Likewise, neither EP 0649781 nor Klein anticipate amended claim 1. As noted above, the Office Action does not use EP 0649781 to reject claim 4, and does not use Klein to reject claim 5. In regards to EP 0649781, there is no second brake system that applies a braking force to other wheels *according to a hydraulic pressure at a position of at least one of two independent circuits of a first brake system*. In EP 0649781, beyond sharing a tandem master cylinder, any second braking system does not communicate with a first braking system as claimed. In regards to Klein, there is no teaching, either expressly or inherently, that Klein utilizes a tandem master cylinder in an anticipatory manner. Moreover, Klein fails to teach a second brake system that applies a braking force to other wheels *according to a hydraulic pressure at a position of at least one of two independent circuits of a first brake system*, at least as those independent circuits are defined in claim 1.

Claims 23 and 24 are allowable for at least the pertinent reasons detailed above that make claim 1 allowable.

**Claims Dependent from Claim 1:** The Office Action does not address how any of the cited references allegedly anticipate any of the claims that are dependent from claim 1. In alleging that Burgdorf, EP 0649781 and Klein variously anticipate claims 1-5, 7-10, 14, 23 and 24, the office action only states that these references anticipate the recitations of claim 1. Indeed, nowhere in the Office action are the recitations of claims 2, 3, 4, 5, 7, 8, 9, 10, 14, and 23 addressed beyond the blanket statement that these claims are rejected under 35 U.S.C. 102(b) as being anticipated. Applicants respectfully submit that it is insufficient to reject claims such as these as anticipated simply because a reference (assumed *arguendo*) anticipates the claim from which it ultimately depends. That is, the Office Action has failed

to adequately present a case as to why the dependent claims, prior to the amendment to claim 1, were rejected.

Notwithstanding this fact, the claims that depend from claim 1 are allowable at least due to their dependency from claim 1. **It is respectfully requested that if any of the claims that depend from claim 1 are again rejected in any next Office Action, the PTO detail why such claims are rejected beyond the fact that they simply depend from a rejected claim.**

**Claim 8:** Claim 8, is amended to include the recitations of claims 1 (prior to amendment) and 10, recites a target braking force and regenerative braking force correcting section that obtains a corrected target braking force and a corrected regenerative braking force by correcting the target braking force and the regenerative braking force so that a braking force distribution to a front axle and a rear axle of the vehicle does not generate a rear wheel lock prior to a front wheel lock. Neither EP 0649781 nor Klein, the references relied on to reject claims 8 and 10, teach this feature.

EP 0649781 does not teach a device for the prevention of wheel lock by controlling a braking force distribution. Klein does discuss the prevention of wheel lock. However, Klein's teachings are only tangentially related to wheel lock in that he teaches that his system may be extended to use with a "compound brake system with anti-lock control and/or traction slip control." (Klein, col. 5, lines 41-43.) That is Klein does not provide specifics as to how anti-lock is implemented; only that his system is compatible with such systems. For example, Klein teaches that in "the event of an anti-lock control and/or of a traction slip control action, the electroregenerative brake circuit II' is prevented from functioning with the aid of a locking switching loop 54." (Klein, cols. 5-6, lines 66-4.) Klein further states that with "such a valve arrangement and multiplex actuation or with other state-of-the-art valve arrangements, the brake pressure in the connected brakes can very precisely be adjusted to the value or pressure course which is favorable for an anti-lock control or a traction slip control system. (Klein, col. 6, lines 18-22, emphasis added.) In sum, Klein merely teaches the suppression of the operation of the electrogenerative brake circuit during certain conditions so that an anti-lock regime may be implemented. Klein does not teach a device for the prevention of a braking

force distribution to a front axle and a rear axle of the vehicle that generates a rear wheel lock prior to a front wheel lock by obtaining a corrected target braking force and a corrected regenerative braking force by correcting the target braking force and the regenerative braking force. In sum, claim 8 is allowable

Applicants further note that the recitations of claim 8 (former claim 10), even prior to amendment, were not sufficiently considered in the Office Action as was detailed above. Applicants again respectfully request that if claim 8 or any of the claims that depend therefrom are again rejected, the PTO specifically detail why such claims are rejected.

#### **Request for Rejoinder of Withdrawn Claims**

Claims 6 and 15-22 were withdrawn in a prior Office Action. Applicants note that these claims depend either directly or ultimately from claim 1. Applicants respectfully request that these claims be rejoined and allowed due to their dependency from claim 1.

Applicants respectfully submit that no significant burden is placed on the PTO by rejoining and examining these claims. Indeed, such action is concomitant with the indication that “upon allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim.”

#### **New Claims**

As seen above, Applicants have added new claims 25-27. These claims are allowable due to their dependency from allowable claims, and due to the reason that none of the cited references teach each and every element of these new claims.

**Conclusion**

In view of the above, it is believed that the claims of the present application are in condition for allowance and this case will be passed to issue.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Examiner Torres is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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By 

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